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The Big Ideas Exchange (BIX)

2018-05-

U.S. Marine Corps Big Ideas

Writt, Andrea; Audette, Matthew; Felder, Adrian;
Vaderzee, Anthony; Wu, Caleb; Reaves, Andrew

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U.S. MARINE CORPS

BIG IDEAS

EXCHANGE

The Big Ideas Exchange (BIX) is an NPS initiative that brings forward new and potentially game-changing thinking developed by NPS faculty and students to address grand challenges in American national security.

DATE: MAY 22, 2018

TIME: 15:00-17:00

LOCATION: GLASGOW HALL ROOM 102

POC: 831/656-1882



—SCHEDULE OF EVENTS—

1500-1510

Introduction by Colonel Lyons

1510-1620

Presentations

Capt. Andrea Writt

High Altitude Balloons and SmallSats for Space Resilience

Capt. Matthew Audette

Counter Swarm Options

Capt. Adrian Felder

Revolutionizing Tactical Networks with Free Space Optics

Capt. Anthony Vanderzee

Predicting the Spread of Terrorist Organizations

Capt. Caleb Wu

Wireless Sensor Networks for Tactical Ground Defense

Maj. Andrew Reaves

The New 29 Palms: Marine Corps Exercises in the Baltic

1620-1630

Break

1630-1700

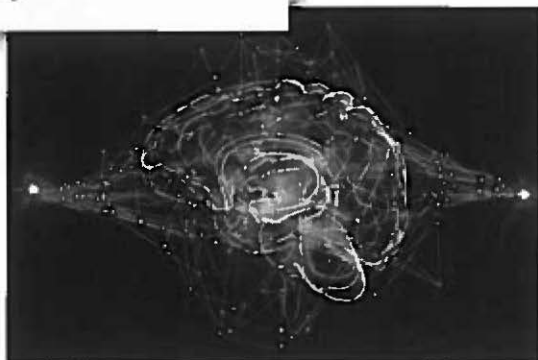
Panel Discussion

1700-1830

No Host Social, Trident Room

*We will be taping the presentations for dissemination online. We will keep the transitions between each presentation to a minimum. Thank you for supporting this format.

**Questions for the presenters will be gathered at the conclusion of each presentation. Please write your question on the 3x5 card provided when you entered the auditorium. We will aggregate the questions for the panel discussion. We will also have mikes on each aisle for questions during the panel.



— BIOS —

Captain Andrea Witt

Captain Andrea Witt is a Combat Engineer Officer with a Bachelor of Science in Mechanical Engineering from the University of Arkansas and is currently working towards her Master of Science in Space Systems Operations here at the Naval Postgraduate School (NPS). Her previous commands before attending NPS, out in Okinawa, Japan include CLB-4, CLR-3, and CLB-31. Following graduation, Captain Witt will move to the Joint Space Operations Center (JSpOC) to act as a space operations planner for the Marine Corps on the joint front.

Captain Matthew Audette

Captain Audette is a Combat Engineer studying Electrical Engineering here at Naval Postgraduate School. His studies are focused primarily on unmanned ground vehicles. He received his undergraduate in Mechatronics Engineering from Southern Polytechnic State University. Prior to NPS he served at Combat Assault Battalion, 3d Marine Division.

Captain Adrian Felder

Captain Adrian Felder is a communications officer studying computer science at the Naval Postgraduate school with a focus area of Free-Space Optics networking. He has extensive experience with most of the Marine Corps' network communications terminals including terrestrial and satellite multichannel radio systems and on-the-move transmissions devices. His operational experience includes a deployment with Marine Expeditionary Brigade-Afghanistan and multiple amphibious exercises with the 1st Marine Expeditionary Brigade. He will graduate with a master's of science in computer science in June 2018.

— BIOS —

(continued)

Captain Anthony Vanderzee

Capt Vanderzee commissioned in December 2011 after graduating from the University of San Diego with a degree in Industrial and Systems Engineering. After completion of The Basic School and Ground Supply Officers Course, Capt Vanderzee served as the Supply Officer for 2d Intelligence Battalion, Camp Lejeune, NC from 2013 to 2016. Capt Vanderzee reported to the Naval Postgraduate School in June 2016 to study Operations Research. Upon graduation, Capt Vanderzee will report to Marine Corps Logistics Command for duties as an Operations Research Analyst.

Captain Caleb Wu

Captain Caleb Wu served as a communications officer and platoon commander with CLR-35 in Okinawa, Japan from January 2014 to May 2016. Selected for the Naval Postgraduate School in 2016, he has been studying in the computer science department and will graduate in June, 2018. For his thesis, he worked on developing a wireless sensor network with commercial-off-the-shelf products that can be used to augment force protection.

Captain Andrew Reaves

Major Andrew Reaves, is an Artillery Officer who has served in multiple billets at the Battery and Battalion level throughout two tours with 3rd Battalion, 11th Marines. He has also served in the 31st Marine Expeditionary Unit's Command Elements and as a member of Marine Corps Training Mission - United Arab Emirates. He has deployed in support of Operation IRAQI FREEDOM and Operation ENDURING FREEDOM in addition to completing five deployments with the 31st MEU in the Asian-Pacific Theater. Currently, he is a student in the National Security Affairs Department with a focus in Eurasian Regional Studies.

— NATIONAL DEFENSE STRATEGY 2018 —

“

Today, we are emerging from a period of strategic atrophy, aware that our competitive military advantage has been eroding.”

“

In this environment, there can be no complacency—we must make difficult choices and prioritize what is most important to field a lethal, resilient, and rapidly adapting Joint Force. America’s military has no preordained right to victory on the battlefield.”



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